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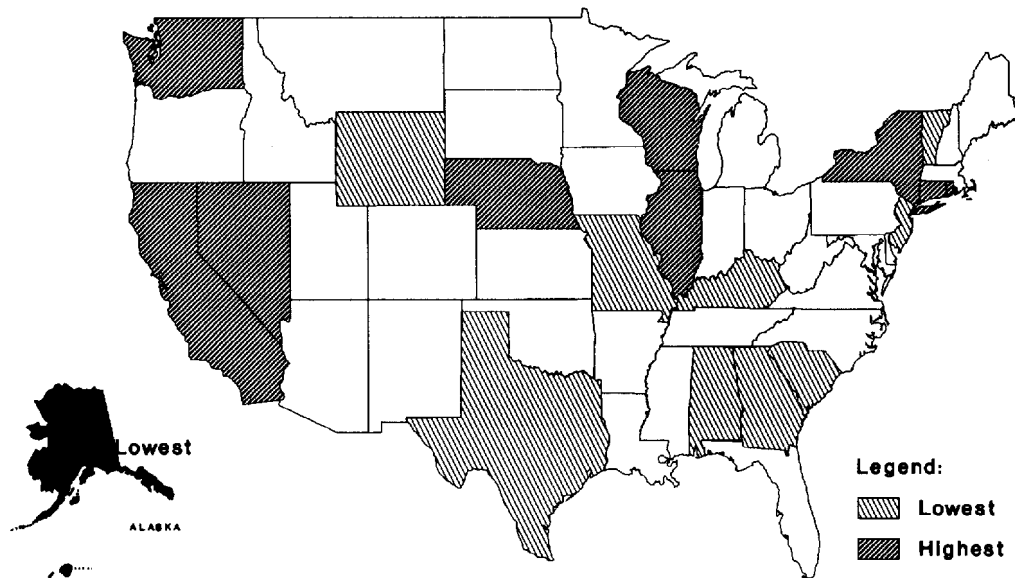
New York, N. Y. 10168-0012

MEMORANDUM

The Rising Tax Burden on Gasoline

Who Pays Gasoline Taxes?

Ten Highest Tax States; Ten Lowest Tax States

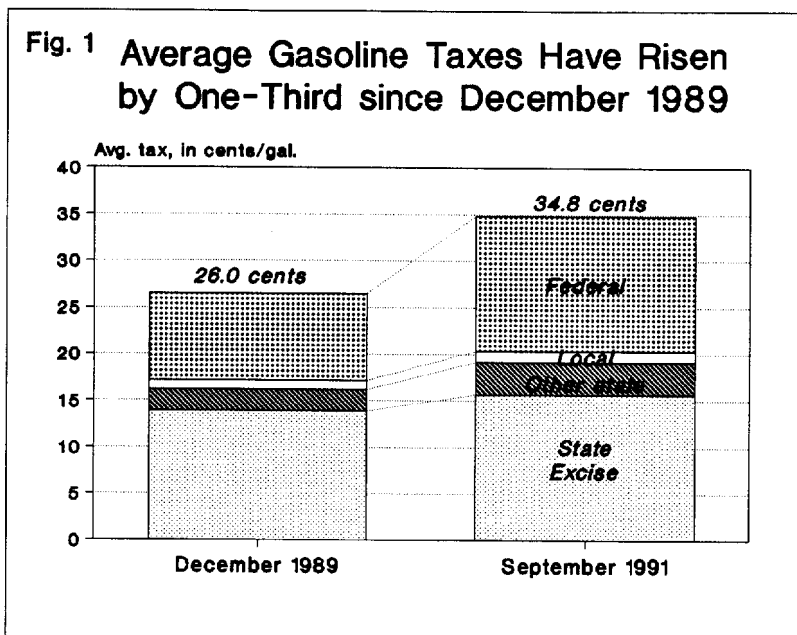


Legend:
Lowest
Highest

Average State and Local Tax: 20.4 cents per gallon
Lowest State: Alaska, 8.0 cents
Highest State: Hawaii, 34.5 cents (incl. local)
Based on September 1991 rates

December 1991

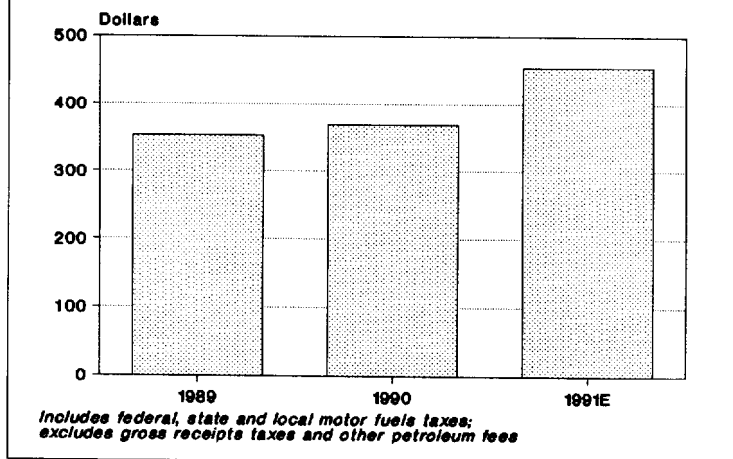
In face of weakened economies, diminishing federal assistance, capped property taxes, and increasing obligations, states and local communities are increasingly looking at gasoline taxes as an important source of revenue. The graphs on this and the next few pages summarize the tax story. Other mandated costs, primarily associated with environmental regulations, are also increasing gasoline prices. These costs are not the main subject here, but according to preliminary estimates could total as much as 20 cents per gallon over the next few years, rising further in the late decade. The once-conventional wisdom that gasoline prices did not reflect their "true" societal cost is less and less supportable.



From December 1989 to September 1991, states and local communities have raised taxes on gasoline by an average of 3.7 cents per gallon (more than 20%). As of September 1, 1991 the national weighted average gasoline tax charged by states and local communities--beyond the 14.45 cent per gallon federal tax--was 20.4 cents per gallon, compared to December 1, 1989's 16.7 cents a gallon¹ (Figure 1). The federal government has raised its excise tax by 5 cents (more than 50%) during this period, and imposed additional new fees. Total gasoline taxes, at 34.8 cents per gallon, represented a total of 30% of the average retail price prevailing by September 1991. In December 1989, at 26 cents, they represented 26% of the prevailing (lower) retail price.

¹ These numbers have been calculated using the pre-tax prices prevailing in each period, and the prescribed methodology for each state or local community's tax. The data have been weighted by state-by-state gasoline consumption. The compilation includes taxes and fees that are (1) levied selectively on gasoline and/or petroleum products and (2) calculated on a cents-per-gallon or percent-of-value basis. They exclude severance and other production taxes, income taxes, and taxes levied on an asset basis, such as per-tank fees for underground storage tank funds.

**Fig. 2 Taxes per Household Rising Sharply
(Motor Fuel Taxes Paid Annually)**



The average household now pays about \$400 annually in federal, state, and local taxes on gasoline, which will total about \$37 billion in 1991 (Figure 2).

But the averages mask the changes and high tax burden in some areas: New York raised its taxes 12 cents per gallon over the period, Massachusetts raised its tax 10 cents (90%); Chicagoans pay 53 cents in gasoline taxes. Figure 3 shows tax increases for the December 1989 to September 1991 period.

After the closing date of our survey, additional tax increases have been imposed: Nevada and Texas, at 2.5¢ and 5¢/gallon respectively on October 1. These two increases raise the average tax about 4/10¢. And even further increases are scheduled: Idaho, Oklahoma and Oregon, for instance, will all increase their excise taxes an additional 2¢ on January 1, 1992. North Carolina is also due for a January 1 increase (0.5¢). Nevada's will rise again on October 1, 1992 and Oregon's will rise again on January 1, 1993. California's excise, also, is rising annually (at 1¢) until 1994.

Fig. 3 Where Are The Increases?
State and local tax increases, in cents per gallon, between December 1989 and September 1991

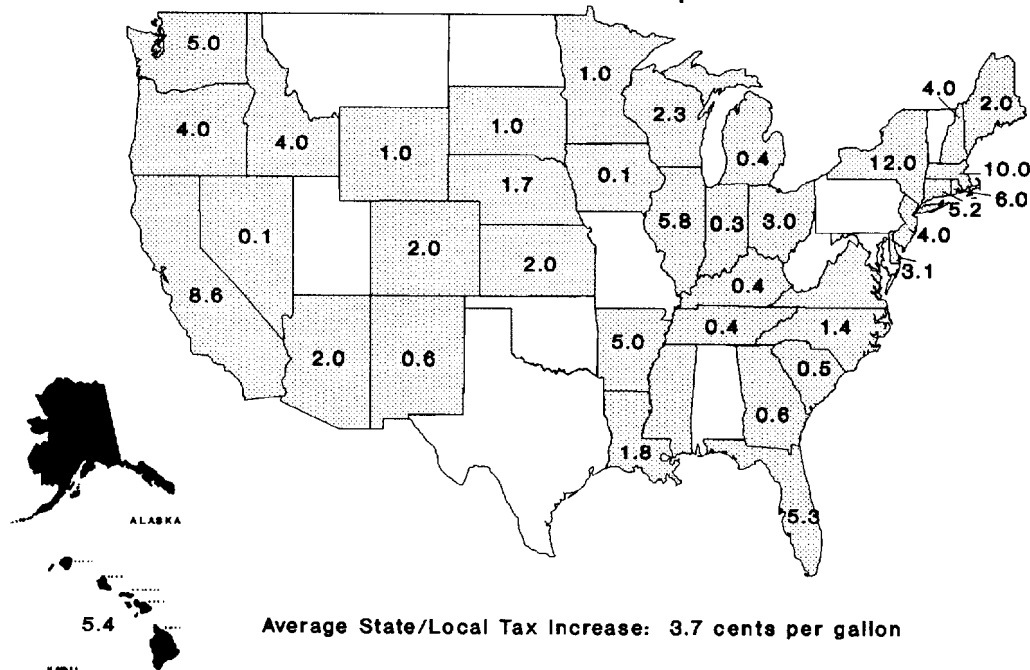
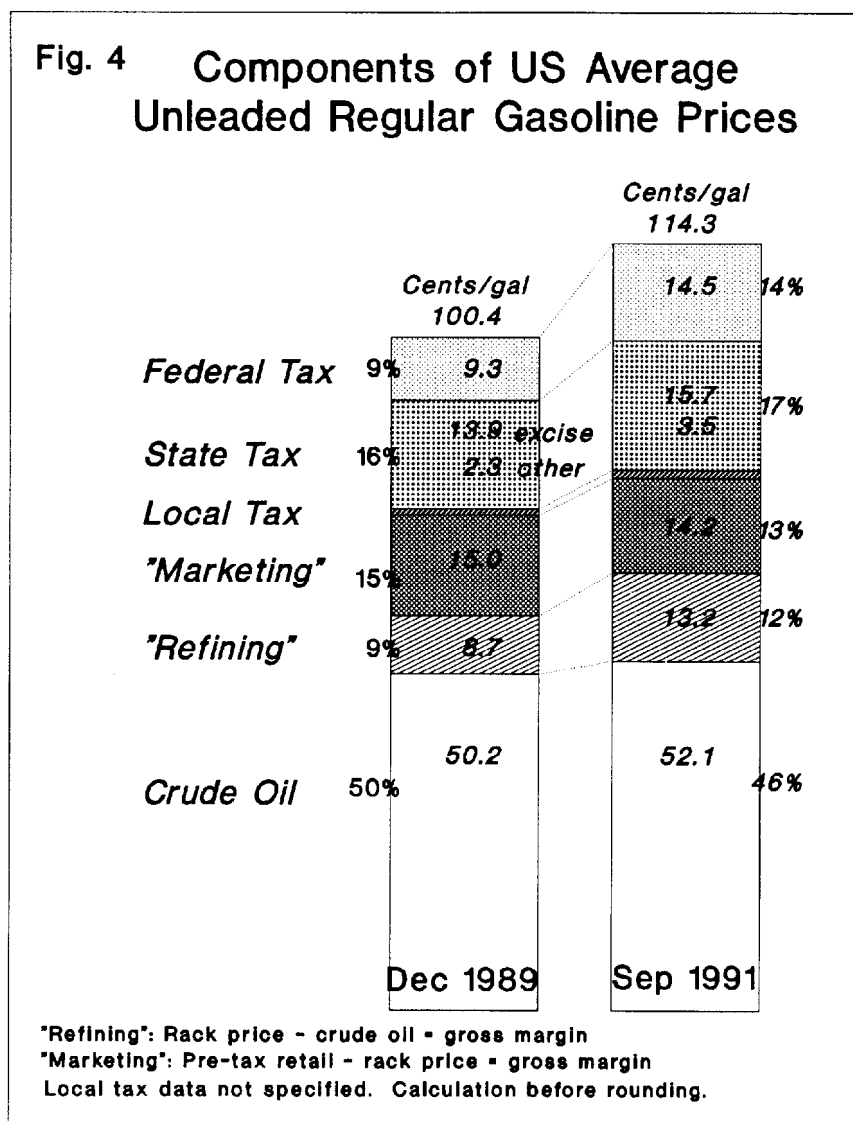


Figure 4 shows that of the total 14¢/gallon increase in the average unleaded U.S. gasoline price between December 1989 and September 1991, more than 60% was due to higher federal, state and local taxes and fees. Crude oil prices also rose, by about two cents. The refining/marketing share of the gross revenue stayed about the same, but the refining portion rose while the marketing portion fell. As will be discussed in the last section of this paper, an important factor is the increased refining costs to comply with mandated changes in the quality of gasoline to make it an environmentally cleaner product.



I. Federal Taxes

The federal tax on gasoline as of September 1991 was 14.45 cent per gallon: the 14 cent excise tax, the 0.1 cent leaking underground storage tank fee², the 0.23 cent Superfund tax³ and the 0.12 cent oil spill liability trust fund fee.⁴ The federal excise tax, as noted earlier, was raised 5 cent per gallon as of December 1, 1990. For December 1989 the federal tax was 9.33 cents, which included a 9 cent excise tax, the underground storage fee, and the Superfund tax.

TABLE 1
FEDERAL TAXES ON MOTOR GASOLINE

(Cents/gallon)

	December 1989	September 1991
Excise	9.00	14.00
Underground Storage Tank Fund	0.10	0.10
Hazardous Substance Trust Fund	0.23	0.23
Oil Spill Liability Trust Fund	0.00	0.12
Total	9.33	14.45

²On January 1, 1987, the federal government began funding the Leaking Underground Storage Tank Fund to clean up leaks at abandoned sites with unidentifiable or insolvent owners, and to bolster state underground storage funds. The Fund reached its target level, \$500 million, in mid-1990. The levy was reauthorized for five years in the Fall of 1990, with no cap on the Fund's target level.

³The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) was originally enacted in December 1980. It established the Hazardous Substance Trust Fund, or Superfund, to pay for cleaning up chemical spills and abandoned hazardous waste disposal sites. Taxes are collected on petroleum, petrochemicals and inorganic chemicals. The Superfund has been reauthorized twice since its inception; its current expiration date is December 31, 1991. The 9.7 cent per barrel tax rate for both domestic and imported crude oil and products was instituted on December 12, 1989. The discrimination between domestic and foreign origin oil which had existed in the previously prevailing rates was eliminated in response to objections from the U.S. trading partners under the General Agreement on Trade and Tariffs.

⁴Collections for the Oil Spill Liability Trust Fund began on January 1, 1990 at 5 cents/barrel (0.12 cents/gallon) on crude oil and petroleum products. The tax is slated to end in 1994 or when the Fund reaches \$1 billion; it will be reinstated if the Fund falls below its target level.

II. State Taxes

States impose excise taxes and a variety of other taxes on gasoline and petroleum products. As of September 1, 1991 the national weighted average total state tax was 19.2 cents per gallon, a 19% increase over December 1, 1989. Illinois and Rhode Island charged the highest tax on gasoline with approximately 26 cents per gallon. Connecticut and New York came right behind with more than 25 cents a gallon. Alaska, its revenues augmented by the vast operation to produce and transport oil from its North Slope, imposed the nation's lowest tax at 8 cents per gallon. (See Appendix Table).

A. Excise Taxes

Excise taxes can be considered a state's base tax, and are usually posted at the pump together with the federal tax. State excise taxes ranged from Florida's 4 cents a gallon to Rhode Island's 26 cents. The national weighted average state excise tax was 15.7 cents, representing a 13% increase over December 1989. Some states have kept their excise taxes relatively low to allow a revenue opportunity for local communities, and others have low excise taxes but impose other taxes of various kinds, described below. Thus, even states with relatively high total gasoline tax burdens, like New York State's 25.3 cents, have low excise taxes: 8 cents per gallon in New York, versus the national average of almost 16 cents. Florida, too, has only a 4 cent per gallon excise tax, while its motorists pay an average of almost 21 cents in total state, county and local taxes.

B. Additional State Taxes

Over half the states also impose additional taxes on gasoline and petroleum products ("added taxes"). These taxes are frequently not visible to motorists i.e. they are not posted at the pump. Some of these taxes are imposed only on gasoline, some on all petroleum products and some are generic sales taxes on all merchandise. The weighted average added tax imposed by states was 3.5 cents per gallon on September 1, 1991, representing a 55% increase over December 1989. The wide variety of purposes for which these additional taxes are imposed puts the petroleum industry increasingly in the position of tax collector. Under the generic category of added taxes were Hawaii's 4% gross receipts tax, Georgia's 3% Second Motors Fuels tax, New York's 12.77 cent Petroleum Business Tax, Delaware's 0.6% hazardous waste tax and Michigan's 4% sales tax, among others.

Some states also imposed fees on gasoline and other petroleum products. For all intents and purposes, these are indistinguishable from taxes. Most fees are earmarked for specific purposes, usually related to gasoline use or storage. For example, Alabama had a 2 cent inspection fee for testing petroleum products and funding roads and bridges, Minnesota a 1 cent fee that kicks in when a clean-up fund is too low, Nevada a 0.6 cent petroleum product discharge fee, New Mexico a 1 cent fee on

distributors of petroleum products and Maryland a 0.12 cent fee on oil imported by marketers from out of the state. The most popular added tax/fee is the underground storage tank fee. Twenty-two states impose a fee ranging from 0.1 cent to 1 cent per gallon that helps fund the maintenance of storage tanks and the cleanup of any leaks at abandoned sites.

III. County and City Taxes

Fifteen states allowed counties and cities the option to impose a gasoline tax to enhance local revenue; communities in 11 of those states exercised that option. By mid-1991, 1.2 cents of the average gasoline taxes across the country were due to local taxes, which represented a 19% increase from December 1989.⁵ Spreading the local taxes across the nationwide average substantially understates their importance for the motorists paying them. For only those states where communities exercise their option to tax gasoline, for instance, the local taxes add 3.2 cents to the average gasoline tax. And for the specific communities imposing a tax, of course, the impact is unmuted: Honolulu's 16.5 cent local tax was the nation's highest; some Florida counties ranked second with a 7 cent charge. Residents of Chicago must pay 53 cents--19 cents above the national average--in total gasoline taxes, including a 5 cent city tax, a 6 cent Cook County tax, a 1% home rule tax, a 0.3 cent state underground storage tank fee, a 6.25% state sales tax, a 19 cent state excise tax, and the 14.45 federal taxes.

In seven states, the "added" and local taxes took the form of double taxation: they taxed a tax. New Jersey, California and Illinois included federal and state excise taxes and federal fees in their base for added and local taxes. For example, Illinois' state sales tax was 6.25% of a base that consisted of the pre-tax price of gasoline *plus* the state excise tax of 19 cents, the federal excise tax of 14 cents, the federal Superfund and oil spill taxes of 0.35 cents and the underground storage tank fee of 0.1 cent. The same base was used for Illinois' local gasoline taxes. Four states--New York⁶, Georgia, Michigan and Hawaii--made a similar calculation for added and local taxes except that they excluded the state excise tax in the base but did include the federal gasoline taxes and fees. All other states simply used the pre-tax price of gasoline as the base for calculating added and local taxes.

⁵ The local taxes have been weighted by the best available information, including estimates provided by state tax authorities and, where necessary, population.

⁶ New York now collects its Petroleum Business Tax on a fixed cents-per-gallon basis, but the state sales tax and the local and county taxes in New York still use federal excise taxes and fees in the calculation. The sales tax also is collected on the Petroleum Business Tax.

IV. Total State and Local Taxes

When considering what the average state resident must pay in excise, additional state and local gasoline taxes, Hawaiians led the nation in paying an aggregate gasoline tax of 34.5 cents per gallon (49 cents with federal taxes included); Illinoisans paid the next highest at 31 cents (45.5 with federal), and New Yorkers were third highest at 29 cents (43.5 with federal). Alaskans enjoyed the lowest state and local gasoline taxes, paying 8 cents per gallon (20.5 cents); Wyomingites were next, at 10 cents (24.5 cents).

During the period December 1, 1989 - September 1, 1991 Massachusetts led with more than 90% gasoline tax hike with New York second at more than 70%; California and its communities raised their gasoline taxes almost 60%.

The U.S. Department of Commerce's Bureau of the Census publishes data each year on state government tax collections. Excise and sales taxes on gasoline still represent a relatively small share of total state revenues, less than 7%. General (non-selective) sales taxes still represent the largest revenue source for state governments. The excise and sales taxes on gasoline and other motor fuels have been providing a larger share of incremental revenue, about twice their share of the base since December 1989.

V. Other Mandated Increases in Gasoline Costs

As shown in Figure 4, the average U.S. pump price for unleaded regular gasoline in September 1991 was about \$1.14 per gallon, up about 14 cents from the level prevailing in December 1989, according to data collected by the *Oil & Gas Journal*. More than half of the increase is due to higher taxes, as noted above. The remainder of the increase is due to the petroleum industry's increased costs, and a re-arrangement of industry revenues among segments.

Among the increased costs are the costs of mandated environmental compliance. These costs range from refiners meeting the Summer regulations for lower volatility of gasoline to installation of vapor recovery equipment at service stations, to replacing (often preventatively) underground storage tanks. According to some estimates, the cost of meeting the new evaporative emissions regulations may be on the order of 3-4 cents per gallon seasonally. The refiner cost of compliance with environmental requirements for higher quality product--more stringent volatility regulations, oxygenated gasoline requirements, reformulated gasoline requirements, etc.--will continue to force their costs up. The marketing industry has further estimated that the cost of installing vapor recovery equipment at service stations (so-called "Stage II Recovery") has averaged about \$30,000 per station, but ranges from \$15,000 to \$50,000. Estimates of the cost of installing new underground storage tanks also vary, ranging from \$30,000-160,000 for a three-tank facility. According to studies done for marketers, the costs of such an

installation, amortized over ten years, would require an additional 3.3 cents per gallon for a 50,000 gallon-per-month location.⁷ Insurance against leaking underground storage tanks, according to industry estimates, has doubled since 1988.

These additional costs together with some of the state and local taxes and fees described above all show clearly how the societal environmental costs of gasoline consumption, the so-called "externalities," are increasingly incorporated into the consumer price of the product. At the national, state and local level, gasoline prices increasingly reflect the costs of environmental risks that may arise from the use of oil. It is important to note that the fees cover environmental *risks* of future problems with unidentifiable or insolvent owners, while current owners must still take actions to ensure that risks are minimized and existing problems remediated. Further reflecting externality costs has been the required progressive phase-out of lead in gasoline that has added another 3-4 cents a gallon to the price. Also, as aforementioned, RVP rules have added an additional 3-4 cents per gallon. These recent changes and the previously noted tax increases--which include underground storage fees but exclude tank fees that 21 states impose--have increased the price of gasoline by 14-15 cents or approximately \$6 per barrel. In coming years gasoline prices will capture even a larger share of externalities due to rising prices from Clean Air Act regulations, perhaps as much as 20 cents per gallon in the next few years, and rising further in the later 1990's--independent of added taxes federal, state and local governments will levy to enhance their revenue.

⁷J.B. Siebert, *Economic Impact on Independent Oil Marketers of Environmental Regulations*, as cited in *National Petroleum News*, May 1991.

APPENDIX I

State and Local Taxes on Motor Gasoline

SUMMARY OF STATE AND LOCAL TAXES ON MOTOR GASOLINE,
SEPTEMBER 1991 AND DECEMBER 1989

(Cents per gallon)

State	Total State & Local Sep '91 Dec '89		-----State Taxes-----						Total Sep '91 Dec '89		Total Local Taxes Sep '91 Dec '89	
			Excise		Other State Taxes							
			Sep '91	Dec '89	Sep '91	Dec '89						
Alabama	14.6	14.6	11.0	11.0	2.0	2.0	13.0	13.0	1.6	1.6		
Alaska	8.0	8.0	8.0	8.0	--	--	8.0	8.0	--	--		
Arizona	19.0	17.0	18.0	17.0	1.0	--	19.0	17.0	--	--		
Arkansas	18.7	13.7	18.5	13.5	0.2	0.2	18.7	13.7	--	--		
California	23.7	15.1	15.0	9.0	6.0	4.4	21.0	13.4	2.7	1.7		
Colorado	22.0	20.0	22.0	20.0	--	--	22.0	20.0	--	--		
Connecticut	27.4	22.3	25.0	20.0	2.4	2.3	25.4	22.3	--	--		
Delaware	20.0	16.9	19.0	16.0	1.0	0.9	20.0	16.9	--	--		
DC	18.0	18.0	18.0	18.0	--	--	18.0	18.0	--	--		
Florida	20.9	15.6	4.0	4.0	11.0	5.7	15.0	9.7	5.9	5.9		
Georgia	12.8	12.2	7.5	7.5	3.9	3.5	11.4	11.0	1.4	1.3		
Hawaii	34.5	29.1	16.0	11.0	3.8	3.4	19.8	14.4	14.7	14.7		
Idaho	22.0	18.0	21.0	18.0	1.0	--	22.0	18.0	--	--		
Illinois	31.1	25.3	19.0	16.0	7.4	5.0	26.4	21.0	4.7	4.3		
Indiana	19.0	18.8	15.0	15.0	4.0	3.8	19.0	18.8	--	--		
Iowa	20.9	20.7	20.0	20.0	0.9	0.7	20.9	20.7	--	--		
Kansas	17.0	15.0	17.0	15.0	--	--	17.0	15.0	--	--		
Kentucky	15.4	15.0	15.0	15.0	0.4	--	15.4	15.0	--	--		
Louisiana	20.0	18.3	20.0	16.0	--	2.3	20.0	18.3	--	--		
Maine	19.0	17.0	19.0	17.0	--	--	17.0	17.0	--	--		
Maryland	18.6	18.7	18.5	18.5	0.1	--	18.6	18.5	--	--		
Massachusetts	21.0	11.0	21.0	11.0	--	--	21.0	11.0	--	--		
Michigan	18.8	18.4	15.0	15.0	3.8	5.4	18.8	20.4	--	--		
Minnesota	21.3	20.3	20.0	20.0	1.3	0.3	21.3	20.3	--	--		
Mississippi	18.5	18.4	18.0	18.0	0.2	0.2	18.2	18.2	0.3	0.3		
Missouri	11.0	11.0	11.0	11.0	--	--	11.0	11.0	--	--		
Montana	20.8	21.0	20.0	20.0	0.8	1.0	20.8	21.0	--	--		
Nebraska	23.7	22.0	23.7	22.0	--	--	23.7	22.0	--	--		
Nevada	23.5	23.4	18.0	18.0	0.6	0.6	18.6	18.6	4.9	4.9		
New Hampshire	18.0	14.0	18.0	14.0	--	--	16.0	14.0	--	--		
New Jersey	14.5	10.5	10.5	10.5	4.0	--	14.5	10.5	--	--		
New Mexico	17.0	16.4	16.0	16.2	1.0	0.2	17.0	16.4	--	--		
New York	29.0	17.0	8.0	8.0	17.3	3.5	25.3	11.5	3.8	3.0		
North Carolina	22.6	21.2	22.3	20.9	0.3	0.3	22.6	21.2	--	--		
North Dakota	17.3	17.5	17.0	17.0	0.3	0.5	17.3	17.5	--	--		
Ohio	21.0	18.0	21.0	18.0	--	--	20.0	18.0	--	--		
Oklahoma	17.0	17.0	16.0	16.0	1.0	1.0	17.0	17.0	--	--		
Oregon	20.7	16.7	20.0	16.0	--	--	20.0	16.0	0.7	0.7		
Pennsylvania	17.4	17.4	12.0	12.0	5.4	5.4	17.4	17.4	--	--		
Rhode Island	26.0	20.0	26.0	20.0	--	--	26.0	20.0	--	--		
South Carolina	16.8	16.3	16.0	16.0	0.8	0.3	16.8	16.3	--	--		
South Dakota	19.0	18.0	18.0	18.0	1.0	--	19.0	18.0	--	--		
Tennessee	21.4	21.0	20.0	20.0	1.4	1.0	21.4	21.0	--	--		
Texas	15.5	15.5	15.0	15.0	0.5	0.5	15.5	15.5	--	--		
Utah	19.0	19.0	19.0	19.0	--	--	19.0	19.0	--	--		
Vermont	16.0	17.0	16.0	16.0	--	1.0	16.0	17.0	--	--		
Virginia	18.1	18.1	17.5	17.5	0.2	0.2	17.7	17.7	0.4	0.4		
Washington	23.4	18.4	23.0	18.0	0.4	0.4	23.4	18.4	--	--		
West Virginia	20.4	20.4	15.5	15.5	4.9	4.9	20.4	20.4	--	--		
Wisconsin	23.5	21.2	22.5	20.8	1.0	0.4	23.5	21.2	--	--		
Wyoming	10.0	9.0	9.0	8.0	1.0	1.0	10.0	9.0	--	--		
Weighted Avg.	20.4	16.7	15.7	13.9	3.5	2.3	19.1	16.2	1.2	1.0		

Note: States weighted by gasoline consumption; local taxes weighted by population where consumption unavailable.